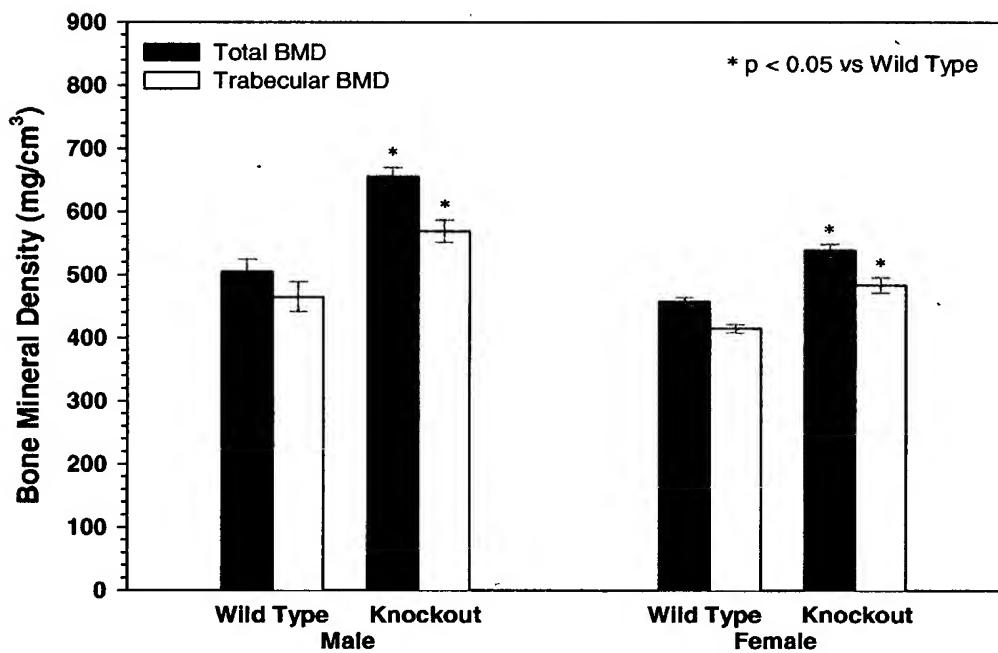
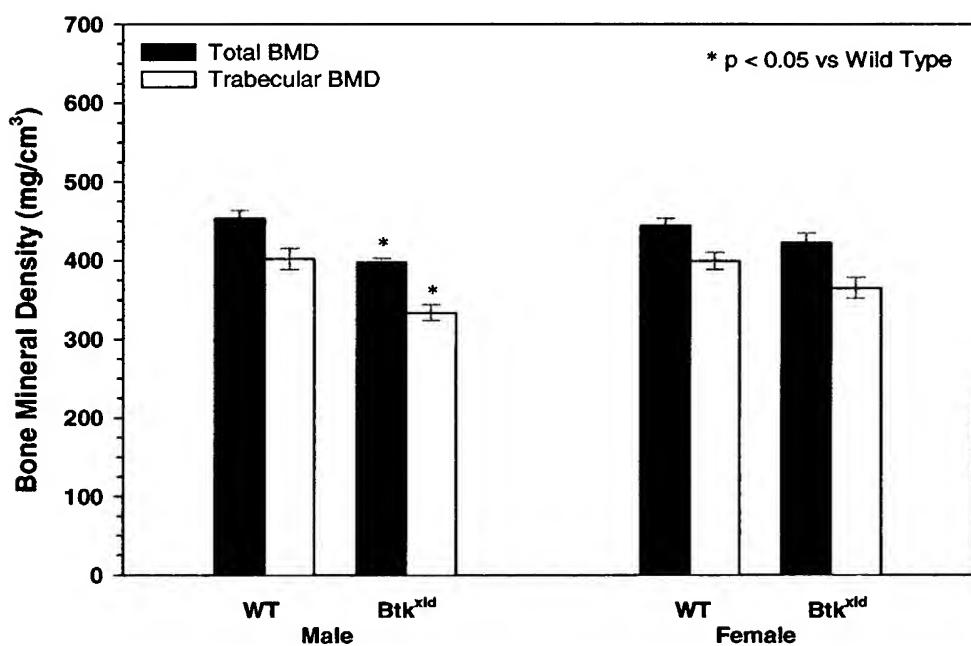


### Bone Mineral Density of the Proximal Tibia in Wild Type and Btk Knockout Mice



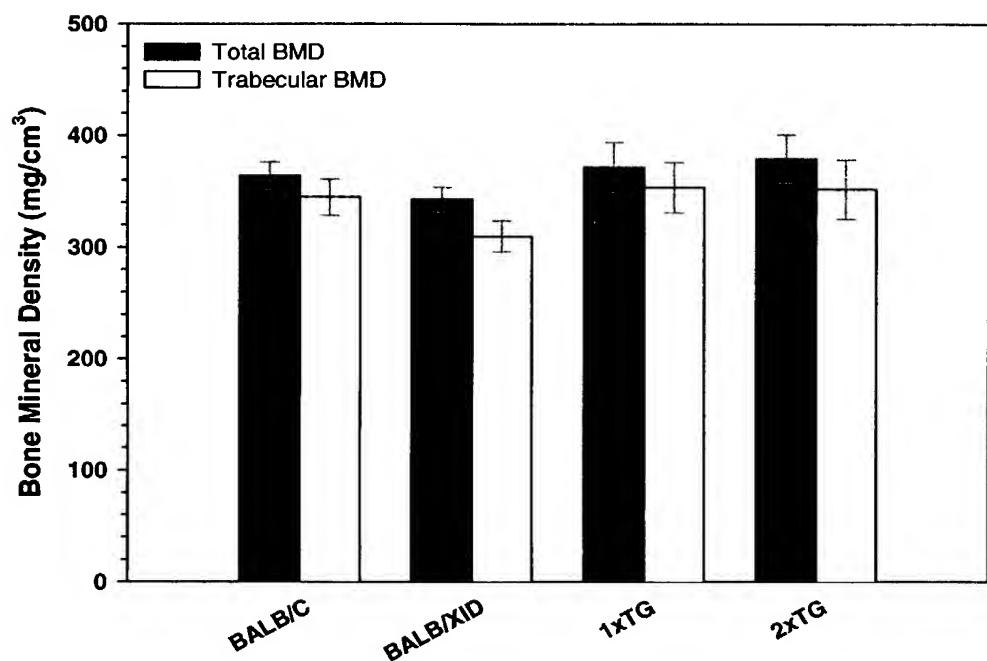
**FIG. 1**

**Bone Mineral Density of the Proximal Tibia  
in Wild Type and  $Btk^{xid}$  Mice**



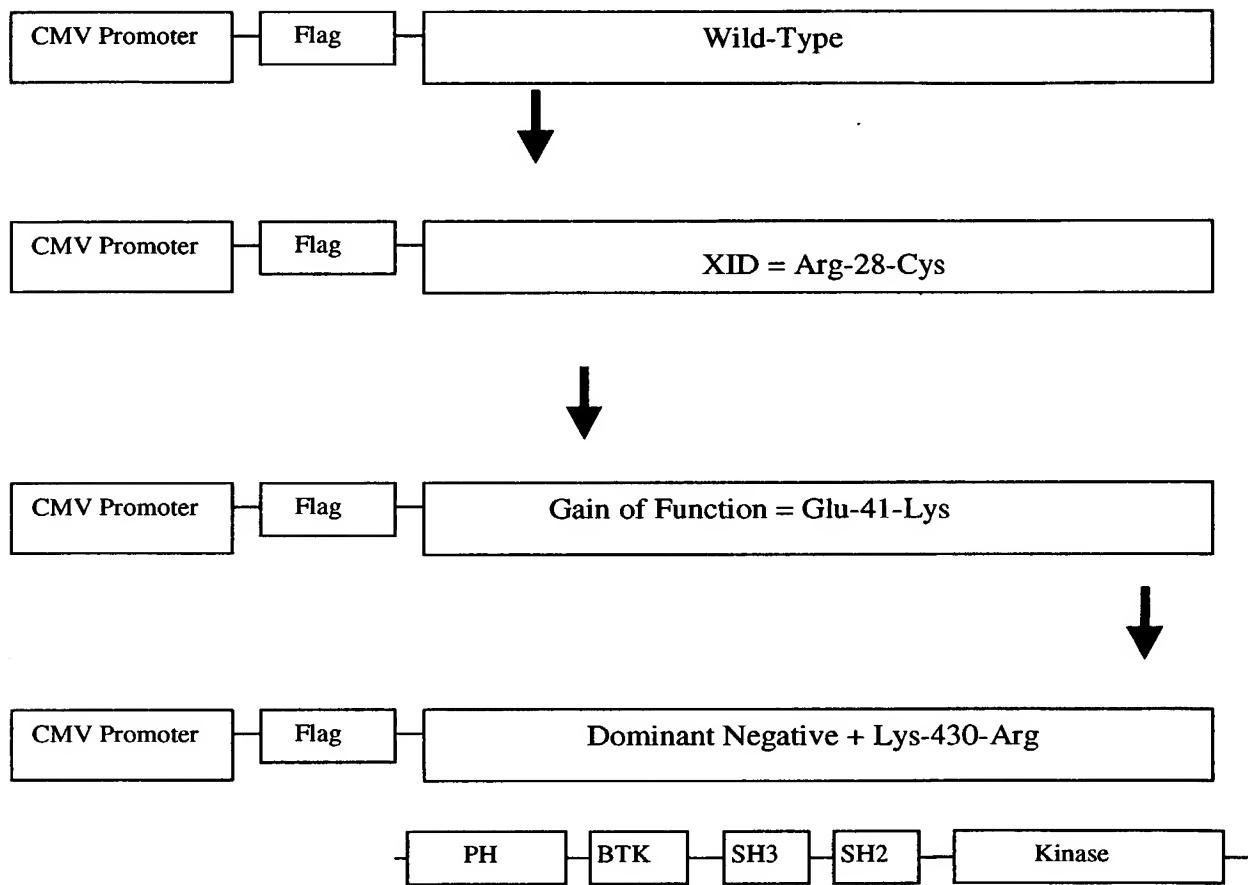
**FIG. 2**

**Female Mice with  $Btk^{lo}$  Transgene**



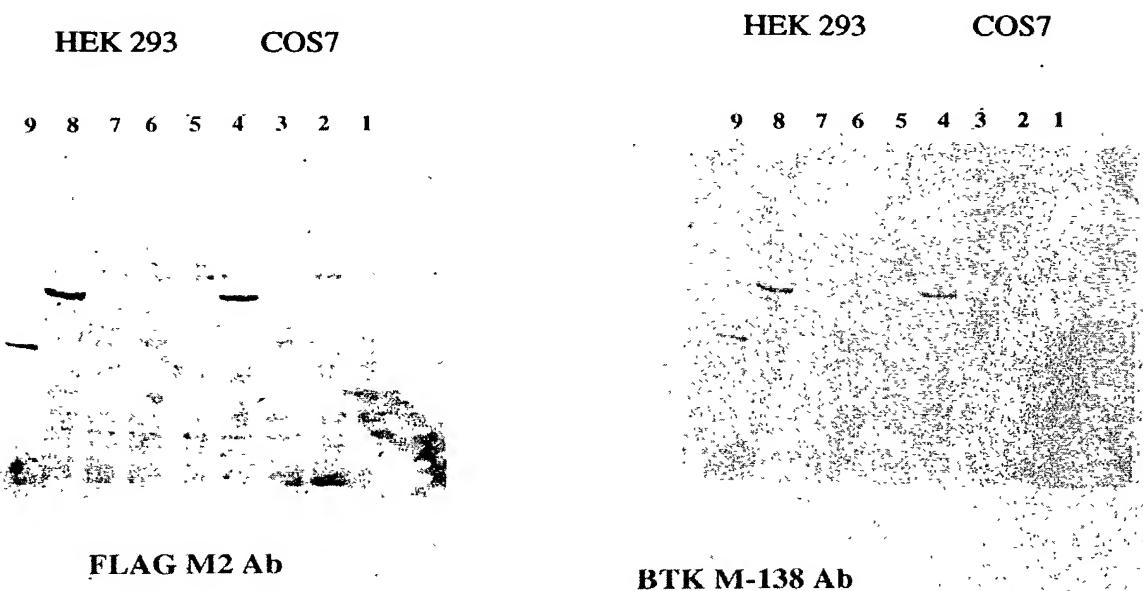
**FIG. 3**

### BTK Constructs



**FIG. 4**

**Mu BTK wt tagged/untagged HEK/COS transient Western**

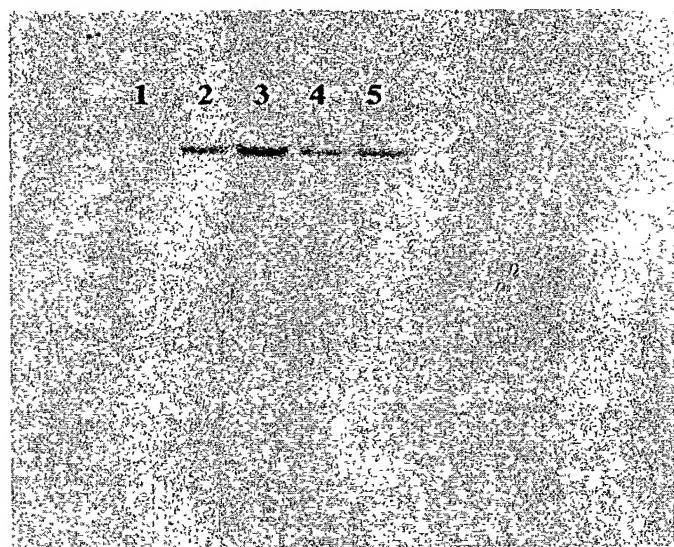


Legend:

- Lanes 1 and 5: pcDNA
- Lanes 2 and 6: BTK wt/pcDNA
- Lanes 3 and 7: p3XFLAG
- Lanes 4 and 8: BTK wt/p3XFLAG
- Lane 9: BAP FLAG control

**FIG. 5**

**BTK-FLAG mutant RAW 264.7 stable mix whole cell lysates**



**α-FLAG Ab**

**Legend:**

- Lane 1: p3xFLAG vector control
- Lane 2: wt BTK in p3xFLAG
- Lane 3: R28C btk in p3XFLAG
- Lane 4: E41K btk in p3XFLAG
- Lane 5: K430R btk in p3XFLAG

**FIG. 6**

### Phosphorylation Analysis of BTK Mutants

$\alpha$ -Flag

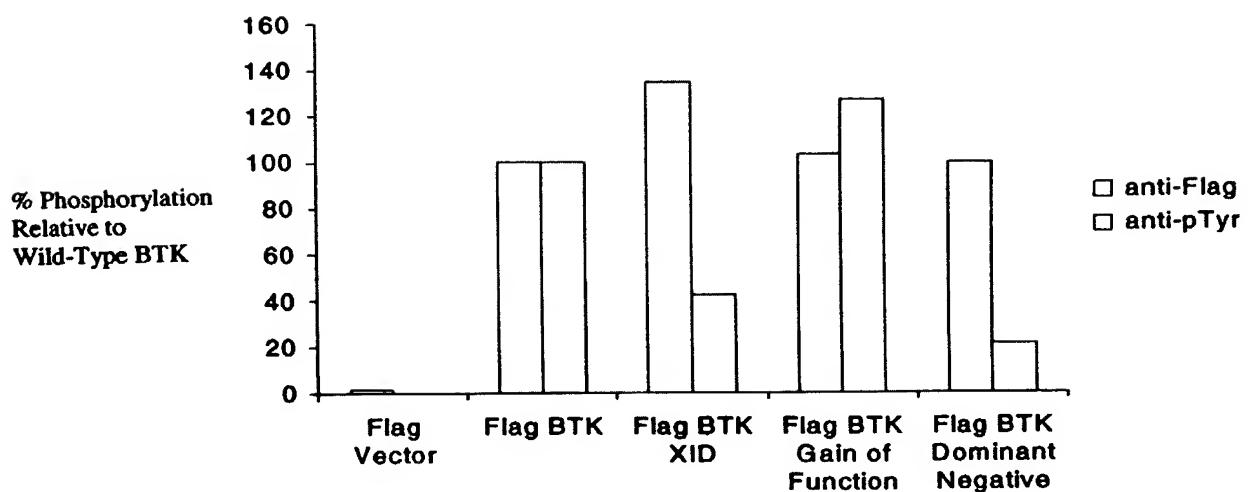


**FIG. 7a**

$\alpha$ -pTyr



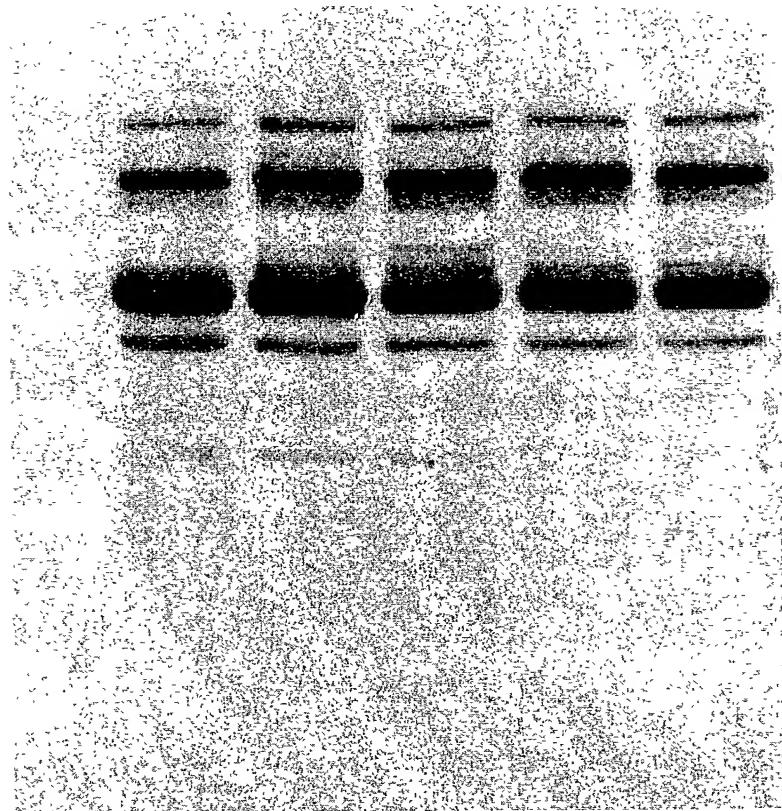
**FIG. 7b**



**FIG. 7c**

**Total Tyrosine Phosphorylation**

Vector      WT      XID      G of F      DN

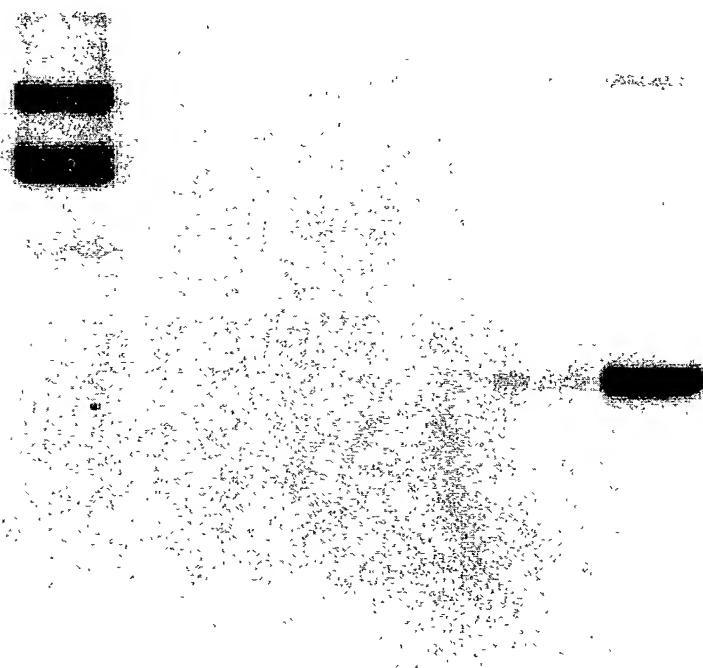


**FIG. 8**

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US Serial No. 10/045,202  
Filed: 10/22/01  
Applicant: C. Patrick McAtee  
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**BTK mutant immunoprecipitation kinase assays**  
*(stable pools, unstimulated)*

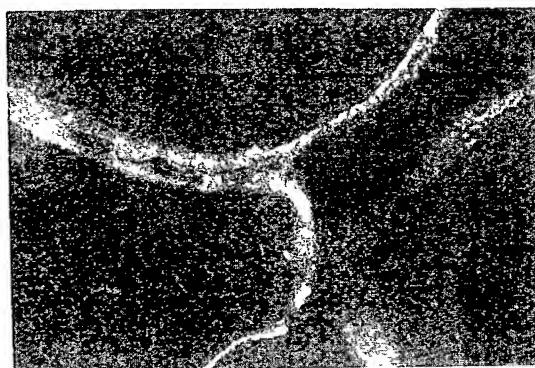
**rBTK      SLP76      Mock IP   Vector   Wild Type   R28C (xid  
mutant)   E41K   K430R**



**FIG. 9**

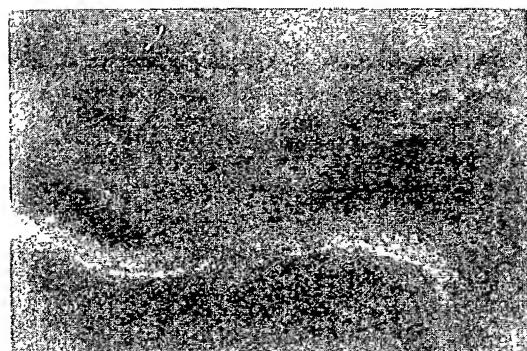
**Actin staining of Btk/RAW cell stable cell lines**

**Btk wt**



**FIG. 10a**

**R28C-xid**



**FIG. 10b**

**E41K-gain of function**



**FIG. 10c**